

# Little Rock School District

## 2012-13 Grade 3 Mathematics Curriculum Map

### Common Core State Standards (CCSS)

### Unit 1

#### Curriculum Overview

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Aug 20-Sept 14 (19 days)	Sept 17-Oct 12 (20 days)	Oct 15-Nov 20 (23 days)	Nov 26-Jan 11 (23 days)	Jan 14-Feb 8 (19 days)	Feb 11-Mar 15 (23 days)	Mar 25-Apr 5 (9 days)	Apr 8-June 5 (37 days)
Numbers and Operations in Base Ten	Operations and Algebraic Thinking: The Relationship between Multiplication and Division	Operations and Algebraic Thinking: The Properties of Multiplication and Division	Operations and Algebraic Thinking: Patterns in Addition and Multiplication	Geometry	Numbers and Operations-Fractions: Representing and Comparing Fractions	Measurement and Data	Gap Lessons for Fourth Grade
		SOAR Oct 17-18	SOAR Dec 12-13		SOAR Feb 27-28		ACTAAP April 8-12
<ul style="list-style-type: none"> <li>○ 3.NBT.1</li> <li>○ 3.NBT.2</li> <li>○ 3.NBT.3</li> <li>● 3.MD.3</li> <li>● 3.MD.4</li> </ul>	<ul style="list-style-type: none"> <li>★ 3.OA.1</li> <li>★ 3.OA.2</li> <li>★ 3.OA.3</li> <li>★ 3.OA.4</li> <li>● 3.MD.3</li> <li>● 3.MD.4</li> </ul>	<ul style="list-style-type: none"> <li>★ 3.OA.5</li> <li>★ 3.OA.6</li> <li>★ 3.OA.7</li> <li>● 3.MD.3</li> <li>● 3.MD.4</li> </ul>	<ul style="list-style-type: none"> <li>★ 3.OA.8</li> <li>★ 3.OA.9</li> <li>● 3.MD.4</li> <li>● 3.MD.5</li> <li>★ 3.MD.6</li> <li>★ 3.MD.7</li> </ul>	<ul style="list-style-type: none"> <li>● 3.G.1</li> <li>● 3.G.2</li> <li>● 3.MD.3</li> <li>● 3.MD.4</li> </ul>	<ul style="list-style-type: none"> <li>★ 3.NF.1</li> <li>★ 3.NF.2</li> <li>★ 3.NF.3</li> <li>● 3.MD.3</li> <li>● 3.MD.4</li> </ul>	<ul style="list-style-type: none"> <li>★ 3.MD.1</li> <li>★ 3.MD.2</li> <li>● 3.MD.3</li> <li>● 3.MD.4</li> <li>★ 3.MD.7</li> <li>○ 3.MD.8</li> </ul>	
Standards for Mathematical Practice should be included in <u>every unit</u> throughout the year.							
OA=Operations and Algebraic Thinking, NBT=Number and Operations in Base Ten, NF=Number and Operations, Fractions, G=Geometry, MD=Measurement and Data ★ Major Standard      ● Supporting Standard      ○ Additional Standard							

Aug 20-Sept 14 (19 days)	Unit 1 Use place value understanding and properties of operations to perform multi-digit arithmetic		
	CONTENT STANDARDS		PRACTICE STANDARDS
	DOMAIN – NUMBER AND OPERATIONS IN BASE TEN (3.NBT)		
CLUSTER Using place value understanding & properties to perform multi-digit arithmetic 3.NBT.1 3.NBT.2 3.NBT.3	<ol style="list-style-type: none"> <li>1. Use place value understanding to round whole numbers to the nearest 10 or 100.</li> <li>2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and /or the relationship between addition and subtraction.</li> <li>3. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 x 80, 5 x 60) using strategies based on place value and properties of operations.</li> </ol>		<p><i>Practice standards are embedded in every lesson throughout the curriculum, although not every practice will be found in every lesson. Numbers 1 and 6 should be evident in every lesson, and the other practices should be embedded as is appropriate to the lesson content and structure.</i></p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively</li> <li>3. Construct viable arguments and critique the reasoning of others</li> <li>4. Model with mathematics</li> <li>5. Use appropriate tools strategically</li> <li>6. Attend to precision</li> <li>7. Look for and make use of structure</li> <li>8. Look for and express regularity in repeated reasoning</li> </ol> <p><u>Categorizing the Practice Standards</u></p> <p>Habits of Mind 1 and 6 Reasoning/Explaining 2 and 3 Modeling/Using Tools 4 and 5 Structure/Generalizing 7 and 8</p>
Aug 20-Sept 14 (19 days)	Unit 1 Represent and interpret data		
	DOMAIN – MEASUREMENT AND DATA		
CLUSTER Represent and interpret data 3.MD.3 3.MD.4	<ol style="list-style-type: none"> <li>3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></li> <li>4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units – whole numbers, halves, or quarters.</li> </ol>		

	<a href="#">Rationale</a>	<a href="#">Instructional Strategies</a>	<a href="#">Essential Questions</a>	<a href="#">Misconceptions</a>
Aug 20-Sept 14 (19 days)	<b>WORKSHOP MODEL OF INSTRUCTION</b>			<a href="#">Vocabulary</a>
Warm Up	WORKTIME Lessons			CLOSURE Choices
<p>Number Talks:  <a href="http://lr3d3rdgrade.mathmap2012-13.wikispaces.com/file/view/Number+Talks.pdf">http://lr3d3rdgrade.mathmap2012-13.wikispaces.com/file/view/Number+Talks.pdf</a></p> <p>Thinking Devices:            Search Teacher Tube and other teacher friendly sites for related videos</p> <ul style="list-style-type: none"> <li>Quick Estimation:            List a series of numbers on the board and have students quickly try to find the answer using estimation.            Ex. Find the answer to the nearest hundred <math>539 + 682 + 459 = 1700</math></li> </ul> <p>Dot Cards  <a href="http://lr3d3rdgrade.mathmap2012-13.wikispaces.com/file/view/Dot+Cards+Large+2+Per+Page.pdf">http://lr3d3rdgrade.mathmap2012-13.wikispaces.com/file/view/Dot+Cards+Large+2+Per+Page.pdf</a></p>	<p><b>BUILD in time to create RITUALS and ROUTINES as a class.</b></p> <p><b>Lesson 1:</b> Have students solve problems using their many strategies. Remember if you need to adapt your lessons you may manipulate the numbers to fit the needs of your students. Here is an <i>example</i> of how this can be done (<i>change the numbers and names to match the needs of your students</i>):            Problem Types – <a href="#">Addition/Subtraction Situations</a>  <i>Example:</i> Lucy has an aquarium with 212 fish.            She wants to buy 68 more fish.            How many fish would Lucy have then?</p> <ul style="list-style-type: none"> <li>- Lucy has 212 fish.            How many more fish does she need to buy to have 280 fish?</li> <li>- Lucy had some fish.            Her mom bought her 68 more fish.            Now she has 280 fish.            How many fish did Lucy have to start with?</li> </ul> <p><b>Lesson 2:</b> Teach Game of Salute (see Wiki for directions/resources)  <a href="http://lr3d3rdgrademathmap2012-13.wikispaces.com/file/view/Salute.pdf">http://lr3d3rdgrademathmap2012-13.wikispaces.com/file/view/Salute.pdf</a></p> <p><b>Lesson 3 :</b> Teach Close to 100 (See Wiki for directions/ resource)  <a href="http://lr3d3rdgrademathmap2012-13.wikispaces.com/file/view/Close+to+100.pdf">http://lr3d3rdgrademathmap2012-13.wikispaces.com/file/view/Close+to+100.pdf</a></p> <p><b>Lesson 4:</b> Present a problem suitable for your class. See problem type charts above.  <i>Example only:</i> Sarah had \$50.00 to spend on refreshments at the fair (or movies). She spent \$17.85 on soft drinks and another \$30.50 for chips and salsa. How much money does she have left?</p> <p><b>Lesson 5:</b> Partner Games with Salute and/or Close to 100  <a href="#">Marilyn Burns Interview</a> – assess students to see their understanding of mathematics to help with future instructional decisions.</p>			<p>Closure options</p> <ul style="list-style-type: none"> <li>▪ Gallery walk</li> <li>▪ Student Discussion</li> </ul> <p>Open-ended Questions/Talk Moves</p> <ul style="list-style-type: none"> <li>▪ Unit Question Bank</li> <li>▪ Talk Moves</li> </ul> <p>Journal Prompts</p> <ul style="list-style-type: none"> <li>▪ Unit Journal Prompt Suggestions</li> </ul> <p>Exit Ticket Ideas</p> <ul style="list-style-type: none"> <li>▪ 'Say Why'</li> <li>▪ Estimation task</li> </ul>

**Lesson 6:** Present a problem suitable for your class. See problem type charts above.

- *Example only:* Cindy's mother went to the ATM and withdrew some money to buy Cindy a special outfit to wear to the concert. It cost \$43.89. Then Cindy's mother had \$31.11. How much money did she withdraw from the ATM?

**Lesson 7:** Hundreds Board (See Wiki for directions/resources)

<http://lrsd3rdgrademathmap2012-13.wikispaces.com/file/view/Hundreds+Board+Activities.pdf>

**Lesson 8 :** The Island Hop (See Georgia Resources from the Wiki)

<http://lrsd3rdgrademathmap2012-13.wikispaces.com/file/view/Unit+1+Georgia+Resources.pdf>

**Lesson 9 :** Shake, Rattle, and Roll (See Georgia Resources from the Wiki)

<http://lrsd3rdgrademathmap2012-13.wikispaces.com/file/view/Unit+1+Georgia+Resources.pdf>

**Lesson 10:** Work stations or Partner Games -- be sure all students have been assessed. Teacher may pull small groups or observe and record on this day. Don't forget closure!

**Lesson 11:** Present a problem.

- *Example Only:* Chris has been saving his allowance to buy a new pair of soccer cleats and a ball. His grandmother gave him \$25 for his birthday. His aunt and uncle gave him \$20 and his parents gave him \$75. Now he had \$279. How much money did he have before his birthday?
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**Lesson 12:** The Great Round Up (See Georgia Resources from the Wiki)

<http://lrsd3rdgrademathmap2012-13.wikispaces.com/file/view/Unit+1+Georgia+Resources.pdf>

**Lesson 13 :** The Power of Properties (See Georgia Resources from the Wiki)

<http://lrsd3rdgrademathmap2012-13.wikispaces.com/file/view/Unit+1+Georgia+Resources.pdf>

**Lesson 14:** Harcourt Math TE Ch. 16 (Volume 2): "Alternative Teaching Strategy" p.322B (pictograph) AND "Reading Strategy" p. 322B (creating pictograph from data)

**Lesson 15:** Work stations or Partner Games / Teacher Choice -- be sure all students have been assessed. If so, teacher may pull small groups or observe and record on this day. Don't forget closure!

**Lesson 16:** Present a problem.

- *Example Only:* Rupert and Ronald aced their math test. So their mother bought for them a wonderful trampoline yesterday. Ronald jumped 157 times on the trampoline. Rupert jumped 86 more times than Ronald. How many times did they jump altogether?

**Lesson 17:** Composing and Decomposing to 19 (See Wiki for resource)

<http://lr3dgrademathmap2012-13.wikispaces.com/file/view/Composing+and+Decomposing+Numbers+to+19.pdf>

**Lesson 18:** Oh No! 99!! (See Wiki for resource)

<http://lr3dgrademathmap2012-13.wikispaces.com/file/view/Oh+No+99.pdf>

**Lesson 19:** Multiples of Ten (See Georgia Resources from the Wiki)

<http://lr3dgrademathmap2012-13.wikispaces.com/file/view/Unit+1+Georgia+Resources.pdf>

## OTHER RESOURCES

### ASSESSMENT

Formative-NBT  
Formative-MD

Harcourt Performance Task Unit 1 Task B  
Directions on PA1 Task on PA4  
Rubric is on PA2

Summative - NBT  
Summative - MD

Harcourt Performance Task Unit 1 Task A  
Directions on PA1 Task on PA3  
Rubric is on PA2

### INTERVENTIONS

- <http://lr3dgrademathmap2012-13.wikispaces.com/file/view/Number+Bonds.pdf>
- <http://lr3dgrademathmap2012-13.wikispaces.com/file/view/Open+Number+Sentences+--+Math+Squares.pdf>

### HOMEWORK IDEAS

- <http://lr3dgrademathmap2012-13.wikispaces.com/file/view/Unit+1+Homework.doc>